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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/639,452	08/15/2000	Ronald Quan	196	2863

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PATENT DEPARTMENT
MACROVISION CORPORATION
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EXAMINER

VENT, JAMIE J

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/639,452	Applicant(s) QUAN, RONALD	
	Examiner Jamie Vent	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-85 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,6-10,16-18,22,24,25,27-32,34-38,40,44-46,50,52-57,59-62 and 64-67 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,11-15,19-21,23,26,33,39,41-43,47-49,51,58,63 and 68-85 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed April 4, 2005 have been fully considered but they are not persuasive.

On pages 29-30 applicant argues that Wroblewski et al fails to disclose, teach, or fairly suggest the limitation of: "lowering the level of a selected portion or portions of the end of a video line and or the horizontal blanking interval to a value lower than the respective normal level of selected portions" as disclosed in Claim 1. It is shown in Figure 1a the lowering of the horizontal sync signal below the normal level of zero and furthermore it is described in Column 2 Lines 39-45. Additionally it is described in Column 2 Lines 60-67 through Column 2 Lines 1-9 the darkening effects that are used by a system to allow for copy protection against the content and thereby meeting the limitations.

Furthermore, on page 30 the applicant argues that Wroblewski et al fails to teach, disclose or fairly suggest the limitation of inserting incorrectly phased color burst in second portion of the horizontal blanking interval as disclosed in Claim 2. It is noted in Column 3 Lines 1+ describes the inserting of incorrectly phased color bursts into the HBI and further allowing copy protection method and thereby meeting the limitation.

Additionally, on pages 32-34 the applicant argues that Wroblewski et al fails to teach, disclose, or suggest the limitation of the blanking level ranging from 100 to -40 IRE as seen in Claims 11,12,13. It is noted that Wroblewski et al in view of Farmer et al teaches the blanking levels to range from 100 to -40 IRE as seen in Figures 5a-5c. Therefore meeting the limitations.

Although all applicants' points are understood the examiner can not agree. Therefore, the rejection is maintained.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 15, 19, 23, 26, 33, 39, 41, 42, 47, 48, 49, 51, 58, 63, 72, 76, 78, 79, 81, and 82 are rejected under 35 U.S.C. 102(b) as being unpatentable by Wroblewski et al.

[claims 1, 72, 81, and 83]

In regard to Claims 1, 72, and 81, Wroblewski et al discloses a method of synthesizing at least part of a copy protection signaling a video signal wherein the video signal formed of video lines having horizontal blanking intervals including horizontal sync, front porch and back porch areas of respective normal levels, and a normal color burst area (Figure 1a), comprising the steps of:

- lowering the level of a selected portion(s) of the end of a video line and or the horizontal blanking interval to a value lower than said respective normal level (Figure 1a shows the lowering of the horizontal sync signal below the normal level of zero and described in Column 2 Lines 39-45);
- inserting a color burst signal of incorrect phase or frequency in a second portion of the horizontal blanking interval (Figure 3a – 3g shows the color burst signal input inserted into the signal. The color burst being inserted are modified and incorrect as disclosed in Column 6 Lines 30-40 and further seen in Figures 1D and 2B); and
- wherein the second portion is spatially arranged in respect of the selected portion or portions such that an attenuation and or darkening effect caused by a basic

copy protection signal causes a recorder or television set to sense the lowered portion or portions to cause the recorder or television set to sample or sense the incorrect color burst signal thereby generating color distortion in the recorder or television set (Figure 6a – 6c shows the sample signal containing the color burst at various placements which would effect the chroma distortion as described in Column 15 Lines 5-18. Furthermore the darkening effect used for copy protection is further discussed in Column 1 Lines 60-67 through Column 2 Lines 1-8 and thereby meeting the limitation).

[claims 15, 76, 78, 79, & 82]

In regard to Claims 15 and 76, Wroblewski et al discloses a method of synthesizing at least a part of a copy protection signal previously in claim 1, with the additional limitations:

- lowering the normal level of a portion or portions of the horizontal blanking interval prior to the horizontal sync to cause an erroneous early scan of the video line (Column 12 Lines 35-45 describes the lowering of the horizontal sync width and position);
- adding a color burst of incorrect phase or frequency to the horizontal sync following the lowered portion (Column 12 Lines 6-19 describes the addition of the color burst with the incorrect phase to the horizontal sync signal); and
- sampling the incorrect color burst in response to the erroneous early scan so as to cause the enhanced chroma distortion.

[claim 19]

Claim 19 contains the limitations as stated in Claim 15 and is analyzed as previously discussed with respect to that claim.

[claim 23]

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In regard to Claim 23, Wroblewski et al discloses an apparatus for enhancing the chroma distortion in a video signal during reproduction of an illegal copy, wherein the video signal also is attenuated by a basic anti-copy protection signal, the video signal including video lines having horizontal blanking intervals with normal levels of horizontal sync, front porch and back porch and a normal color burst, comprising:

- circuitry for lowering the level of a selected portion of the horizontal blanking interval to below the normal level (Figure 13 shows the circuit for the apparatus wherein Column 14 Lines 35-65 described the lowering of the selected portion of the horizontal blanking interval);
- a gate logic circuit for supplying a sample signal in response to the selected portion of lowered level (Figure 13a shows the burst gate which supplies the sample signal in response to the lowering level);
- subcarrier generator/combining circuits for supplying a color burst of incorrect phase or frequency in a further portion of the horizontal blanking interval (Figure 13b burst 42 supplies the color burst while the burst gate generator 16, burst inverter 34, burst envelop shaper 38, and burst separator combines together to make the color burst of incorrect phase); and
- wherein said further portion is positioned in respect of the selected portion to cause sampling by the sample signal of the incorrect color burst rather than of the normal color burst, so as to cause the enhancement of the chroma distortion (Figure 6a – 6c shows the sample signal produced by Figure 13b wherein the color burst at various placements which would effect the chroma distortion as described in Column 15 Lines 5-18.)

[claim 26]

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In regard to Claim 26, Wroblewski et al discloses an apparatus wherein the gate logic circuit is responsive to selected sync signals for also producing incorrect pre sync and post sync color burst gate signals (Figure 13b shows the burst gate generator which selects incorrect post sync burst gate signals as described in Column 14 Lines 48-52).

[claim 33]

In regard to Claim 33, Wroblewski et al discloses an apparatus including: a line location circuit responsive to the selected sync signals for supplying a line location signal which determines which video lines are to include the incorrect signals (Figure 13b the line counter 18 determines and supplies the location signals which are thereby determined to be incorrect signals).

[claim 39]

In regard to Claim 39, Wroblewski et al discloses a method of modifying a video signal to provide a copy protection effect, with the additional limitation of generating a color burst signal of incorrect phase or frequency and adding the generated incorrect color burst signal to the horizontal blanking interval within the horizontal sync and/or after the normal color burst signal (Column 12 Lines 5-19 generating a color burst of incorrect phase and placed it within and or after the horizontal sync).

[claim 41]

Claim 41 contains the limitations as stated in Claim 39 and is analyzed as previously discussed with respect to that claim.

[claim 42]

Claim 42 contains the limitations as stated in Claim 39 and is analyzed as previously discussed with respect to that claim.

[claim 47]

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Claim 47 contains the limitations as stated in Claim 15 and is analyzed as previously discussed with respect to that claim.

[claim 48]

In regard to Claim 48, Wroblewski et al discloses a method wherein the incorrect color burst signal is located after the lowered back porch portion (Figure 5d shows the incorrect color burst signal located after the back porch area).

[claim 49]

In regard to Claim 49, Wroblewski et al discloses a method wherein the incorrect color burst signal is located prior to the lowered back porch portion (Figure 5e wherein the color burst is located prior to the beginning of the lowered back porch portion).

[claim 51]

Claim 51 contains the limitations as stated in Claim 1 and is analyzed as previously discussed with respect to that claim.

[claim 58]

Claim 52 contains the limitations as stated in Claim 23 and is analyzed as previously discussed with respect to that claim.

[claims 63 & 68]

In regard to Claims 63 and 68, Wroblewski et al discloses an apparatus including a timing circuit for generating a horizontal blanking interval of expanded duration which extends into a portion of active video (Column 12 Lines 35-45 describes the expanding of time of the horizontal blanking).

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4, 5, 11, 12, 13, 14, 20, 21, 43, 69, 70, 73, 74, 75, 77, 80, 84 and 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wroblewski et al in view of Farmer et al.

[claims 2, 73, 84 and 85]

In regard to Claims 2, 73, 84, and 85 Wroblewski et al discloses a method wherein the incorrect color burst signal is added to at least a portion of horizontal sync signal (Figure 3a-3e shows a color burst signals where incorrect, modified or modulated color burst are added to the back porch area to cause incorrect sampling as further disclosed in Column 6 Lines 49-67); however fails to clearly disclose the color burst signal is added to the back porch area so as to cause the sampling or sensing of the incorrect color burst signal. Farmer et al discloses a system wherein a color burst is added to the back porch area as seen in Figures 5a-5c and further described in Column 9 Lines 39-55 wherein it the adding of color burst is described. The additional color burst signal being added to the back porch allows for a better copy protection due to incorrect sampling of the video data. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use the copy protection system disclosed by Wroblewski et al and incorporate a system wherein the color burst is added to the back porch area causing incorrect sampling, as disclosed by Farmer et al.

[claim 4]

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In regard to Claim 4, Wroblewski et al discloses a method wherein the incorrect color burst is added to the back porch area, and the selected portion which is lowered in level is a pseudo sync signal inserted in a portion of the back porch area prior to the incorrect color burst signal (Figure 1a shows the lower level which contains pseudo sync signal as seen prior to the incorrect color burst signal that is inserted).

[claim 5]

In regard to Claim 5, Wroblewski et al discloses a method wherein:

- the incorrect color burst signal is added to the horizontal sync signal, and the selected portion which is lowered in level is post pseudo sync signal on the back porch area, following the incorrect color burst signal and immediately adjacent the beginning of the respective active video line (Figure 4b shows the selected portion lowered to the level of the sync signal and further described in Column 7 Lines 40-61); and
- the post pseudo sync signal and the beginning of the active video line form a pseudo sync/automatic gain control (AGC) pulse pair (Column 14 Lines 25-27 describe the forming of the automatic gain control).

[claim 11]

In regard to Claim 11, Wroblewski et al discloses a method including selecting the video lines of the video signal in which the chroma distortion enhancement is applied (Column 14 Lines 23-29 describes the line selector which instructs the selecting of video lines of the video signal with which enhancements have been applied).

[claims 12, 69, 70, 75, 77, & 80]

In regard to Claims 12, 69, 70, 75, 77, and 80, Wroblewski et al discloses a method wherein the level is lowered from blanking level through a level of -30 IRE (Figure 1 shows blanking level to

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range from 100 to -40. Furthermore, the 40 IRE burst amplitude color burst is presently lowered to the -30 IRE).

[claims 13 & 75]

In regard to Claims 13 and 75, Wroblewski et al discloses a method wherein the level is dynamically varied through a range of a few IRE above blanking level to -30 IRE (Figure 1 shows the blanking level range from 100 to -40).

[claims 14, 71, & 74]

In regard to Claims 14, 71, and 74, Wroblewski et al discloses a method wherein expanding the duration of a horizontal blanking interval (Figure 1a shows the expansion of the horizontal blanking interval).

[claim 20]

Claim 20 contains the limitations as stated in Claim 5 and is analyzed as previously discussed with respect to that claim.

[claim 21]

Claim 21 contains the limitations as stated in Claim 5 and is analyzed as previously discussed with respect to that claim.

[claim 43]

Claim 43 contains the limitations as stated in Claim 14 and is analyzed as previously discussed with respect to that claim.

Allowable Subject Matter

[Claims 3, 6, 7, 8, 9, 10, 16, 17, 18, 24, 25, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 40, 50, 52, 53, 54, 55, 56, 57, 59, 60, 61, 62, 64, 65, 66, & 67]

Claims 3, 6, 7, 8, 9, 10, 16, 17, 18, 24, 25, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 40, 50, 52, 53, 54, 55, 56, 57, 59, 60, 61, 62, 64, 65, 66, & 67 are objected to as being dependent

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upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Examiner notes Ryan et al (US 5,844,988) discloses a modification and lowering in level of the front porch area as seen in Figure 15b and 15c; however, Ryan et al is not prior art under 35 USC 103 with the instant application.

[Claim 22]

Claim 22 is allowed.

The following is an examiner's statement of reasons for allowance:

Wroblewski et al discloses a method for lowering the horizontal blanking interval and adding color bursts of incorrect phase or frequency (Column 12 Lines 5-45); however, fails to disclose the method of determining the average picture level which thereby adjusts the horizontal blanking level. Therefore, the prior art of record fails to teach, suggest, or disclose a method of "adjusting the lowered levels of the portion of the horizontal blanking level and/or of the pseudo horizontal sync in response to the average picture level".

[claim 44, 45, 46, 66, & 67]

Claims 44-46, 66 and 67 are allowed.

The following is an examiner's statement of reasons for allowance:

Wroblewski et al discloses a method for enhancing chroma distortion consisting of lowering the level of selected portion of the horizontal blanking interval to a value lower than the respective level (Figure 1b). It is further seen the enhancements are made through color bursts which are placed in the back porch area as seen in Figure 2a; however, fails to add modifications to the front porch area. Therefore, the prior art of record fails to teach, suggest, or disclose a method of "lowering the level of selected portion of the front porch area prior to the horizontal sync to a value lower than the respective normal level."

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamie Vent whose telephone number is 571-272-7384. The examiner can normally be reached on 7:30am-5:00pm.

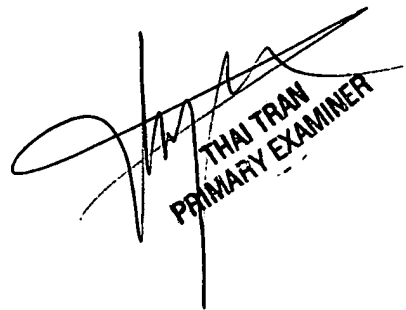
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on 571-272-7950. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jamie Vent
06/22/2005



THAI TRAN
PRIMARY EXAMINER